RIGHTS, POWER, AND INEQUALITY

BRYAN H. DRUZIN*

Abstract

This Article offers a rational choice model of rights that explains how rights informally arise and how systems of social and structural inequality emerge as a result. Whatever else they are, rights are coordinating standards that reduce the risk of conflict when interacting with others. If you believe in Right X and I do not, the risk of conflict between us increases; if we both believe in Right X, the risk of conflict between us decreases. All else being equal, individuals therefore have an incentive to recognize (at least publicly if not also internally) rights that are most widely recognized by others because doing so best minimizes the risk of conflict. This produces *network effects*: as more people recognize a right, its conflict-minimizing value increases, which, in turn, causes more people to recognize the right in a self-reinforcing fashion.

This model explains why inequality is such a persistent feature across both time and culture. Otherwise-trivial imbalances in power between agents reliably spark patterns of inequality that network effects then magnify and lock in at scale. The model also helps explain the historical emergence and stability of political-legal systems of extreme inequality such as feudalism, slavery, aristocracy, patriarchy, and other institutionalized systems of inequality.

Table of Contents

Introduction	500
I. Taking Rights Descriptively	503
A. Assumptions	504
B. Rights Defined	
C. Rights Generate Network Effects	
II. The Evolution of Rights	514
A. The Coordinating Function of Rights	
B. How Network Pressure Triggers the Formation of Rights	

^{*} Associate Professor, Faculty of Law, The Chinese University of Hong Kong. PhD in Law, King's College London; LL.M, J.D., B.A., University of British Columbia. I am grateful to Eric A. Posner at the University of Chicago and Moshe Hirsch at the Hebrew University of Jerusalem for their helpful comments and suggestions on the core model set out here. Any errors are, of course, my own.

III. The Rise of Inequality	518
A. Equality: Pedestrians vs. Pedestrians	518
1. Droughts and Water Rights	519
2. Shopping Malls and Walking Rights	
B. Inequality: Pedestrians vs. Cement Trucks	522
C. Hyper-Inequality: A Million Cyclists vs. One Cement Truck	524
1. An Answer to Hume's Question	524
2. The Emergence of Hyper-Inequality	525
3. Locked-in Inequality	
Conclusion	

Introduction

Before rights are legally codified (if they ever are), they are informally acknowledged at what H.L.A. Hart called the "pre-legal" level. Rights at this stage emerge as an informal patterning that exists alongside the law, and which, over time, often hardens into legislation. One would think that without a central legislative authority establishing and enforcing rights, it would be impossible for rights to arise. This is, however, not the case. Stable patterns of rights reliably emerge. This Article sets out a rational-choice model that explains how this occurs and how this leads to systems of social and structural inequality.

To build this model, we need not, I argue, begin with anything more than the following empirical claim: communities of people, for whatever reason, collectively recognize certain rights that, when ignored, increase the risk of conflict with others. For example, if you recognize property rights and I do not, the risk of conflict between us increases; if we both recognize property

^{1.} See H.L.A. HART, THE CONCEPT OF LAW 169-70 (3rd ed., 2012).

^{2.} See id. at 170. Even rights that are conferred purely through legislation and have no informal analog at the pre-legal level—for example, the right to dissolve parliament or to operate a forklift—ultimately derive their authority from the right of the lawmaker to establish rights. This right to create law, by definition, must at one point have preceded law. At some stage in its development, legal authority was, therefore, a pre-legal right. The question of legal validity is a central topic of debate among legal positivists (and other schools). See Hans Kelsen, Pure Theory of Law 10–15 (Max Knight trans., 2d ed. 1967) (1934) (explaining the existence of a validating master norm—the Grundnorm or "basic norm"—from which legislation ultimately draws its legitimacy); see also Hart, supra note 1, at 105 ("The rule of recognition providing the criteria by which the validity of other rules of the system is assessed is in an important sense . . . an ultimate rule"); John Austin, The Province of Jurisprudence Determined 11–21 (David Campbell & Philip Thomas eds. 1998) (1832) (explaining Austin's command theory of legal validity).

rights, the risk of conflict between us decreases. This potential for conflict produces what is known in the economics literature as network effects, which simply means that standards become more valuable as more people use the same standard.3 A standard is any shared norm or practice that enables a group of people to interact with one another.⁴ A messaging app, for example, is a standard,⁵ as are currencies, languages, moral codes, and legal systems. Whatever rights are from a normative perspective, on a practical level rights function as coordinating standards: recognizing the same right as other people decreases the risk of conflict with them, while not doing so increases it. All else being equal, individuals thus have an incentive to (at least publicly if not also internally) recognize rights that are most widely recognized by others because this best minimizes their risk of conflict with others.⁶ This explains how rights gain common recognition at the pre-legal level. As more people recognize a right, its value as a conflictminimizing standard increases as does the cost of not recognizing that right, which, in turn, causes more people to recognize the right in a selfreinforcing fashion.⁷ Entire societies, in this fashion, spontaneously converge around unified sets of rights, many of which are then codified into law over time.8

From this simple model of rights formation, we can begin to build a theory of inequality. There is a lot of debate around the concept of "inequality," so I should be clear at the outset as to what I mean by the term. For the purposes of this discussion, inequality simply means that

^{3.} See infra Section I.C. Note that this Article uses the terms "network effects" and "network externalities" interchangeably.

^{4.} DAVID SINGH GREWAL, NETWORK POWER 21 (2008) ("[A standard] is the shared norm or practice that enables network members to gain access to one another, facilitating their cooperation.").

^{5.} See id.

^{6.} Their motivation, of course, may also be a genuine belief in the right's normative legitimacy. Yet rights recognition can occur in the absence of such belief driven merely by the desire to avoid conflict with others. The primary focus here, therefore, is on the avoidance of conflict rather than internalized belief.

^{7.} Note that the social cost increases because the likelihood of conflict increases as more agents with whom one interacts recognize the right.

^{8.} The concept "society" is in reality a mosaic of overlapping, nested sub-networks, interconnected to varying degrees. For purposes of clarity, the discussion operates on the level of the grosser network, what is commonly referred to as a "society" or culture.

^{9.} See RONALD DWORKIN, SOVEREIGN VIRTUE: THE THEORY AND PRACTICE OF EQUALITY 2 (2000) ("Equality is a contested concept: people who praise or disparage it disagree about what it is they are praising or disparaging.").

agents under similar circumstances do not possess the same rights, and that this imbalance favors some at the expense of others. ¹⁰ Inversely, equality is where agents under similar circumstances possess the same rights and none is favored at the expense of the other. ¹¹ Because network effect markets are highly sensitive to minor disturbances, local rights patterns sparked by trivial imbalances in power between agents can get powerfully amplified as network effects kick in and standardize inequality at scale. Entire systems of legal inequality may emerge in this way. Once institutionalized, these systems become very difficult to dislodge. I am speaking here of political-legal systems structured around deeply entrenched inequality, such as feudalism, aristocracy, patriarchy, and slavery. These rights systems, which shape a society's legal, political, and economic organization, often break down in relation to gender, race, religion, tribe, caste, or class. ¹²

Of particular interest here is the emergence of what I call *hyper-inequality*. A system of hyper-inequality is one in which those disadvantaged by a rights pattern, *as a group*, hold more power than those who benefit from it.¹³ While this may seem paradoxical, it is actually quite common. Most of the examples cited above are systems of hyper-inequality. Medieval European serfs, for example, were as a group collectively more powerful than the relatively few feudal lords that ruled

^{10.} In this Article, inequality is measured in terms of whether the agents' preferences are or are not satisfied. Even this basic definition, however, buckles under scrutiny. For example, at what point can circumstances be deemed similar? What are the salient elements of similarity that determine this? Moreover, are agents best understood as individuals, groups, or abstract political entities? For the purposes of this discussion, however, this simple formulation is adequate to make my argument.

^{11.} Note that equality does not necessarily imply treatment that is fair; it merely implies treatment that is the same. It is, for example, arguably unfair for two men in a running race to have the same starting position if one is born without a leg. Such normative questions, however, are not the focus of this Article and so are not taken up here. See JOHN RAWLS, A THEORY OF JUSTICE (1971) (famously arguing that inequalities are just so long as they ultimately accrue to the benefit of the least fortunate class; see also Martha Minow, Equality vs. Equity, 2021 Am. J.L. & EQUAL. 167, 170–74, https://perma.cc/PXF2-2UX8 (distinguishing equality and equity).

^{12.} While the focus here is on larger systems of inequality, the model applies to rights formation at any level, and may be usefully applied to, for example, gay rights, gender rights, or even animal rights.

^{13.} Note that hyper-inequality does not necessarily mean that the inequality is more extreme than other forms of inequality (in terms of the agents' preferences). Rather, hyper-inequality simply implies that the power imbalance is inverted and favors the discriminated class.

over them and who they greatly outnumbered, yet for centuries they accepted a system of rights under which they were profoundly disempowered. As David Hume notes, there is a strange "easiness with which the many are governed by the few." The emergence and stability of hyper-inequality is difficult to explain because the underlying power dynamic suggests that rights should not evolve in this fashion. The model of rights formation I set out below, however, explains how stable systems of hyper-inequality can emerge.

My argument proceeds in three parts. Part I explains the main assumptions that underpin the model, offers a more careful definition of rights, and gives a detailed explanation of network effects. Part II sets out my model of rights formation in more detail. Part III then examines how systems of social and structural inequality emerge in relation to power. Applying the model, I explain the emergence of equality, inequality, and hyper-inequality. Some general remarks are offered here on why patterns of inequality are so ubiquitous across time and culture. The final section concludes.

I. Taking Rights Descriptively

This section sets out key concepts and definitions crucial to the discussion. This section first describes the main assumptions underlying the model of rights formation that form the basis of the article. It then offers a precise working definition of rights and discusses some of the finer points of the definition. The section then concludes with a detailed explanation of network effects. In this section and throughout the Article, a decidedly non-normative tack is assumed. This is not to imply that the normative dimension to rights is unimportant. The Article simply sets such questions to one side. The goal is to give a descriptive account of how rights form and how this gives rise to systems of legal, social, and structural inequality.

^{14.} See R.H. HILTON, THE DECLINE OF SERFDOM IN MEDIEVAL ENGLAND 9 (1969) ("[T]he practical limits on freedom were openly institutionalized as hereditary juridical servitude. Hereditary servile status in medieval Europe was the lot, by and large, of the bulk of the peasantry."); MARC BLOCH, FEUDAL SOCIETY 331 (L. A. Manyon trans., Univ. of Chicago Press 1961) (1939) ("[I]n England, the conception of serfdom had been extended to the point where the majority of peasants were branded with this stigma.").

^{15.} DAVID HUME, Of the First Principles of Government, in Political Essays 16, 16 (Knud Haakonssen ed., 1994) (1741).

A. Assumptions

The model rests on four key assumptions. I try to keep these as simple and as uncontroversial as possible. The assumptions are as follows:

- 1. People wish to minimize unnecessary conflict with others;
- 2. When people do not recognize the same right, the potential for conflict increases;
- 3. All else being equal, people will recognize a right to minimize conflict; and
- 4. The right that is most recognized best minimizes the potential for conflict.

If these assumptions hold true, rights recognition produces network effect pressure ("network pressure"). Network pressure helps shape the 'marketplace' for rights because it pushes agents to recognize certain rights over others. It is key to understanding the emergence and stability of systems of inequality. I examine each of these assumptions in greater detail below.

The first assumption—that people prefer to avoid unnecessary conflict—should be relatively uncontroversial. Of course, people may engage in conflict if they feel the payoff is worth it. What people wish to avoid is "unnecessary conflict." "Unnecessary conflict" in this context means situations in which the potential cost of conflict exceeds the potential payoff. For example, while there is a payoff to always running red lights (i.e., faster travel), the potential cost of conflict (i.e., a fatal accident) offsets the payoff (at least in the long term). ¹⁸ Conflict may manifest at different levels of intensity—anything from a polite reprimand to violence that ends in the death of one or more of the parties involved.

The second assumption should also be fairly uncontroversial: when people recognize different rights, the potential for conflict increases. For example, drivers who each hold differing views as to who should have the

^{16.} Network pressure is defined here as a combination of the network effects and its accompanying lock-in effect. Network pressure is at its strongest when an entire network has converged around the standard in question. *See infra* Section I.C (discussing network lock-in).

^{17.} See infra Section III.C.

^{18.} I use the example of traffic throughout the discussion. Where the analogy is invoked, I mean the emergence of traffic patterns in the absence of legal enforcement.

right of way at an unmarked intersection are more likely to collide than two drivers who share a common understanding of who has the right of way. This potential for conflict exists at every level of interaction. Thus, we can make the general claim that the more people who recognize contradictory rights, the greater the potential for conflict. Whatever rights are from a normative perspective, on a practical level, commonly recognized rights perform a coordinating function in terms of minimizing conflict.

The third assumption flows from the first two assumptions: all else being equal, people will recognize a right to minimize conflict. The subordinate clause, "all else being equal," however, is doing a lot of work here. If a person is not affected by the right and does not have any strong preferences either way, they will publicly recognize a right, even one they do not actually believe, simply to reduce the potential for conflict. For example, most drivers do not have strong feelings regarding which side of the road they drive on and will thus happily drive on the side of the road that local convention (or law) dictates. 19 Compliance, however, may also extend to situations where people privately reject the right so long as the potential for conflict is great enough. For example, a driver who, for whatever reason, strongly prefers to drive on the left-hand side of the road rather than the right will nevertheless drive on the right if that is the prevailing rule.²⁰ How far this can be pushed depends on how great the potential conflict is for noncompliance and how strong an agent's preference is against recognizing the right.

The fourth assumption follows logically from the previous ones. If the practical effect of recognizing a right is reducing the risk of conflict, then there is an intrinsic advantage to using a common standard—the more commonly recognized the standard, the better.²¹ Returning to our unmarked intersection example, imagine two rights: Right A and Right B. Right A

^{19.} Dana Yagil, Reasoned Action and Irrational Motives: A Prediction of Drivers' Intention to Violate Traffic Laws, 31 J. APPLIED Soc. PSYCH. 720, 721–24 (2001) (analyzing the reasons drivers commit traffic violations and probability of accidents).

^{20.} In more technical game theory analysis this is understood as a battle of the sexes game structure. In the battle of the sexes, the parties' preferences are partly coincident and partly opposed. The classic example is a scenario in which a husband wants to attend a football game and the wife wants to see the opera, yet both would prefer to do the other's activity if the alternative is to do their activity alone. *See* R. Duncan Luce & Howard Raiffa, Games and Decisions: An Introduction and Critical Survey 90–94 (1957).

^{21.} In some cases, rights recognition may be rewarded in the form of social praise, etc. This, however, is not true in the case of all rights (unlike the potential for conflict) and so this is omitted from the model.

holds that the driver on the left has the right-of-way and is recognized by ten drivers. In contrast, Right B holds that the driver on the right has the right-of-way and is recognized by 10,000 drivers. Here, there is a clear advantage to recognizing Right B over Right A.²²

The term "marketplace for rights" is used here to mean something similar to the metaphorical marketplace of ideas: a process through which normative principles are examined by people and judged, rationally or intuitively, as correct or lacking merit and then accepted or rejected on that basis.²³ This is, of course, a fiction. Rights do not gain ascendency in this way. But it is a useful fiction for thinking about how rights actually form and so is used in this discussion.

B. Rights Defined

The discussion requires that we flesh out the concepts of both rights and network effects. This section lays out a definition of rights.

There has been considerable debate surrounding the concept of rights for roughly the past three centuries.²⁴ Jeremy Bentham famously described rights-talk as "nonsense on stilts,"²⁵ arguing that "when a man is bent on having things his own way and gives no reason for it, he says: I have a right to have them so."²⁶ Early legal positivists such as Bentham considered the idea of natural moral rights as conceptual nonsense.²⁷ The debate continues today. Some contemporary theorists argue that the concept of rights is

^{22.} For the moment, I am putting aside the possibility of localized rights patterns within larger networks. This phenomenon explains the divergence in rights standards that we see. *See infra* note 51 and accompanying text.

^{23.} While this "image of competing ideas and robust debate dates back to English philosophers John Milton and John Stuart Mill, Justice Holmes first introduced the concept into American jurisprudence in his dissent in the 1919 case *Abrams v. United States*" by arguing that "the best test of truth is the power of thought to get itself accepted in the competition of the market." Stanley Ingber, *The Marketplace of Ideas: A Legitimizing Myth*, 1984 DUKE L.J. 1, 3 (quoting 250 U.S. 616, 630 (1919) (Holmes, J., dissenting)).

^{24.} See, e.g., SIMON BLACKBURN, ETHICS: A VERY SHORT INTRODUCTION 78–82 (2d ed. 2021) (identifying academic debate on rights); MIRKO BAGARIC, PUNISHMENT AND SENTENCING: A RATIONAL APPROACH 109–12 (2001) (noting that providing a coherent definition of rights "has persistently plagued rights based theories").

^{25.} See Jeremy Bentham, Anarchical Fallacies, in 'Nonsense Upon Stilts': Bentham, Burke and Marx on the Rights of Man 46, 53 (Jeremy Waldron ed., 1987); see also Mary Ann Glendon, Rights Talk: The Impoverishment of Political Discourse (1991) (critiquing the oversimplification of individual rights-based discourse in America).

^{26.} Bentham, supra note 25, at 73.

^{27.} See id. at 76 ("Nonsense it always was from the beginning").

foundational to both law and morality,²⁸ while modern positivists have described rights (colorfully) as irrational, meaningless "emotional ejaculations."²⁹

Emotional ejaculations or not, our discussion can sidestep this intense battle over the normative status of rights by adopting a purely descriptive account of rights. For the purposes of this discussion, a right is understood simply as any demand or constraint on another agent's or agents' behavior or state of being in relation to another agent or agents, the non-recognition of which increases the potential for conflict when interacting with others. Conflict can range from disapproving glares from strangers, to the ridicule of acquaintances, social ostracism, formal censure, to even legal punishment.

A few points about this definition should be noted. First and foremost, the definition is entirely descriptive, so it does not depend on any particular normative theory of rights.³⁰ Rights exist as an empirical matter. The normative validity of the right (or lack thereof) is irrelevant to the model. What is offered is a positivist account of rights no different than a descriptive account of popular tastes in clothing.

Second, the definition sees rights as relational. Rights only have meaning to the extent that they frame individuals' interactions with each other.³¹

^{28.} See, e.g., DWORKIN, supra note 9, at 184–205; J. Raz, On the Nature of Rights, 93 MIND 194, 194–97 (1984); JOSEPH RAZ, ETHICS IN THE PUBLIC DOMAIN: ESSAYS IN THE MORALITY OF LAW AND POLITICS 44–59 (1994); CARL WELLMAN, REAL RIGHTS 5 (1995) ("It is of great legal and moral importance to know when an alleged right is real because rights have practical implications, most notably the legal or moral duties they imply.").

^{29.} RAYMOND WACKS, UNDERSTANDING JURISPRUDENCE 245 (3d ed. 2012) (citation omitted).

^{30.} The main theoretical debate concerning rights in legal and political philosophy is between those who advocate rights-based theories and those who argue goal-based theories. See H.L.A. Hart, Between Utility and Rights, in The Idea of Freedom: Essays in Honour of Isaiah Berlin 77, 77–98 (Alan Ryan ed., 1979). Rights-based theories are predicated on a concern for individual interests; goal-based theories, such as utilitarian theories, relate to furthering something taken to be in the interests of the common good. See id.; see also Introduction to Theories of Rights 1, 1–20 (Jeremey Waldron ed., 1984) (analyzing rights-based and goal-based theories). On the idea of "rights as trumps," see Ronald Dworkin, Taking Rights Seriously, at xi (1977).

^{31.} Immanuel Kant described the relational aspect as a constituent feature of rights. *See* Ariel Zylberman, *Kant's Juridical Idea of Human Rights, in* Kantian Theory and Human Rights 27, 33–34 (Andreas Follesdal & Reidar Maliks eds., 2013) ("Rights are *relational* in that they concern exclusively 'the external and indeed practical relation of one person to another." (citation omitted)); *see also* Wesley Newcomb Hohffeld, Fundamental Legal

Thus, if there were only one human, the concept of a right would have no meaning. This one human would not have a "right" to water, a "right" to not be devoured by wild animals, or a "right" to shelter. Rights are the limits of a person's interests in relation to one or more other persons.

Third, this definition covers rights that enjoy informal as well as formal legal recognition. The definition captures all manners of rights, from the most trivial and non-legal to the constitutionally enshrined. The potential for conflict is a defining feature of rights. This is often accompanied by a secondary right to sanction others for failing to recognize the primary right.

A similar emphasis on sanctions is used in the law and norms literature to define norms.³² This is no coincidence. Rights are normative concepts.³³ That is, they designate certain human behaviors as desirable and permissible and others as bad, undesirable, and impermissible. Rights are rooted in the idea that there exists the prescribed and proscribed—that there are boundaries of 'ought' and 'ought not' that ring human conduct. Rights may be understood as the by-product of particularly intense norms.³⁴ Like

CONCEPTIONS AS APPLIED IN JUDICIAL REASONING AND OTHER LEGAL ESSAYS 37–42 (Walter Wheeler Cook ed., 1919) (explaining that rights—regardless of their classification as a privilege, power, or immunity—produce correlatives because they are relational). This relational aspect of rights is also central the "will" theory of rights and the "interest" theory of rights. See H.L.A. HART, ESSAYS ON BENTHAM: STUDIES IN JURISPRUDENCE AND POLITICAL THEORY 162–94 (1982) (explaining that under the will theory, a right conveys the ability to determine what others may and may not do); J.E. PENNER & E. MELISSARIS, MCCOUBREY & WHITE'S TEXTBOOK ON JURISPRUDENCE 110 (5th ed. 2012) ("According to the interest theory, a person is the bearer of a right whenever an interest of her or hers is protected by the imposition of a duty on another or others.").

- 32. See Lawrence Lessig, The New Chicago School, 27 J. LEGAL STUD. 661, 662 (1998) ("Law... directs behavior in certain ways; it threatens sanctions ex post if those orders are not obeyed."). It is probably because the law and norm scholars argue from a predominantly rational choice perspective that they tend to emphasize the importance of sanctions as this is most amenable to explaining the behavior of a rational actor. Sanctions-based definitions of social norms are also standard fare in other disciplines. See, e.g., Robert Axelrod, An Evolutionary Approach to Norms, 80 AM. Pol. Sci. Rev. 1095, 1097 (1986) ("A norm exists in a given social setting to the extent that individuals usually act in a certain way and are often punished when seen not to be acting in this way." (italics omitted)).
- 33. PENNER & MELISSARIS, *supra* note 31, at 109 ("Rights are norms expressed from the perspective of, and in terms of the interests of, the individual."). *See infra* Section II.B (asserting that prevailing rights are internalized and seen in a normative light).
- 34. As such, this Article uses the terms norms and rights interchangeably. This Article employs the following definition of a social norm: norms are "socially shared and enforced attitudes specifying what to do and what not to do in a given situation." Deborah A. Prentice,

the froth upon a surging wave, when normativity intensifies, rights emerge.³⁵ While rights are more apparent when they relate to normative concepts of a grand nature, like rights related to liberty and the protection of property, where there is normativity of *any* kind, even in its most trace form, a right conferred upon one or more persons will arise. It is merely that these rights are often so trivial in nature that they do not win the label of a "right" and so go mostly unrecognized.

Consider, for instance, the norm that it is inappropriate to wear a hat while eating at a dinner party.³⁶ This social rule confers a right to all of the non-hat-wearing dinner guests to demand that other guests not wear a hat to dinner. To use the terminology of the legal theorist Wesley Newcomb Hohfeld, this produces for the dinner guests a *liberty* that imposes on others a *duty* to not wear a hat to dinner. The norm thus confers a right to dine in a hat-free environment to all the dinner guests.³⁷ These rights are not as commonly recognized as rights as in other cases. As normativity increases in intensity, however, the presence of rights becomes easier to spot. Consider queuing norms. A person waiting in line has a claim on others that they respect the order of the queue.³⁸ All people in the queue have a duty to not cut in front of those waiting before them.³⁹ Anyone flouting social rules such as hat-wearing and queue-jumping might find themselves subject to informal sanctions. When we graduate to normatively intense areas of

The Psychology of Social Norms and the Promotion of Human Rights, in Understanding Social Action, Promoting Human Rights 23, 23 (Ryan Goodman et al. eds., 2012).

^{35.} See Tom Campbell, Rights: A Critical Introduction 27–30 (2006) (arguing similarly that rights evolve from social rules or norms).

^{36.} See Dilshan, 7 Reasons Why It's Rude to Wear a Hat at the Dinner Table, READY SLEEK, https://www.readysleek.com/rude-to-wear-hat-at-dinner-table/ (last updated Jan. 6, 2022).

^{37.} See HOHFELD, supra note 31, at 42. This liberty-right is not even confined to the dinner party at which one is participating, although we generally recognize the participants as being the primary holders of such a right. Note that while a Hohfeldian analysis of rights may be incorporated into the model, for our purposes, there is little theoretical benefit in delving rigorously into the Hohfeldian incidents. As such, only brief reference to Hohfeld's analysis of rights is made here.

^{38.} See David Fagundes, The Social Norms of Waiting in Line, 42 L. & Soc. INQUIRY 1179 (2017).

^{39.} Similarly, James Coleman defines norms in their relation to rights. See JAMES S. COLEMAN, FOUNDATIONS OF SOCIAL THEORY 243 (1994) ("Those subscribing to a norm . . . claim a right to apply sanctions and recognize the right of others holding the norm to do so. . . . [A] norm concerning a specific action exists when the socially defined right to control the action is held not by the actor but by others.").

human interaction, however, such as norms against inflicting physical harm on or taking the property of others, rights become startlingly clear. On this intense end of the normative spectrum, the law usually codifies these behavioral standards as "rights," reinforcing their protected status through formal recognition and the threat of legal sanctions.⁴⁰

Norms define the boundaries of ought and ought not. A norm will always confer a right on one or more people to have their conditions arranged in a certain manner. A person waiting in the front of the line has a right to be served before those behind her and a right to command that others do not cut the line. A dinner guest has the right to dine in a hat-free environment. A non-smoker has a right (in situations where there is a norm against smoking) to not be exposed to cigarette smoke and a right to demand that others refrain from smoking. Wherever there are normative conceptions in any form, there is a right of some kind bestowed upon one or more people. We may take any norm, inspect it, and we will find rights of some kind associated with that norm.

C. Rights Generate Network Effects

With rights properly defined, this section seeks to unpack the concept of network effects in more detail. Long recognized in economics and the literature on standards, network effects (or network externalities) occur where the value of a standard increases as the number of other agents using the same standard grows.⁴¹ Each additional user draws in more users, creating a snowball effect that triggers a spontaneous convergence around a particular standard.⁴² This occurs because the standard's usefulness is tied to the size of the network. This is known as its synchronization value.⁴³ As

^{40.} Coleman defines a norm and its corollary rights by its very lack of legal codification: "A norm is not a legally defined right or a right based on a formal rule imposed by an actor having authority. It is, rather, an informal or socially defined right. It may exist in the absence of a legally defined right...." *Id*.

^{41.} See S.J. Liebowitz & Stephen E. Margolis, Network Effects and Externalities, in The New Palgrave Dictionary of Economics and the Law 671, 671 (Peter Newman ed., 1998) (citation omitted); see also Paul A. David, Clio and the Economics of QWERTY, 75 Am. Econ. Rev. 332, 335 (1985) (describing network effects by analyzing the rise of the QWERTY keyboard structure).

^{42.} See Liebowitz & Margolis, supra note 41, at 671.

^{43.} *Id.*; Michael L. Katz & Carl Shapiro, *Network Externalities, Competition, and Compatibility*, 75 Am. Econ. Rev. 424, 424 (1985) ("[T]he utility that a given user derives from the good depends on the number of other users who are in the same "network" as he or she.").

the network of users grows, its value also grows.⁴⁴ There are many examples of network effects. Network effects are evident, for example, in the case of currencies, telephone networks, legal standards,⁴⁵ social media platforms,⁴⁶ security alliances,⁴⁷ international organizations,⁴⁸ credit card

^{44.} Id. See generally W. Brian Arthur, Competing Technologies, Increasing Returns, and Lock-in by Historical Events, 99 Econ. J. 116 (1989) [hereinafter Arthur, Competing Technologies]; W. Brian Arthur, Positive Feedbacks in the Economy, 262 Sci. Am. 92 (1990) [hereinafter Arthur, Positive Feedbacks]; W. Brian Arthur, Increasing Returns and Path Dependence in the Economy (1994); S. J. Liebowitz & Stephen E. Margolis, Path Dependence, Lock-in, and History, 11 J.L. Econ. & Org. 205 (1995).

^{45.} See e.g., Michael Klausner, Corporations, Corporate Law, and Networks of Contracts, 81 VA. L. REV. 757 (1995) (examining the impact of network externalities in corporate contracts); Marcel Kahan & Michael Klausner, Path Dependence in Corporate Contracting: Increasing Returns, Herd Behavior and Cognitive Biases, 74 WASH. U. L.Q. 347 (1996) (discussing how network externalities of agency costs and behavioural biases can lead to standardization in corporate contracting); Mark A. Lemley & David McGowan, Legal Implications of Network Economic Effects, 86 CALIF. L. REV. 479, 481 (1998) (suggesting ways "particular legal rules should—and should not—be modified to take account of network effects"); Clayton P. Gillette, Lock-in Effects in Law and Norms 78 B.U. L. REV. 813 (1998) (examining the idea of network effects and the related notion of lock-in, in an effort to assess the strengths and weaknesses of adjudication versus legislation, as well as regulation through norm formulation); Clayton P. Gillette, Harmony & Stasis in Trade Usage for International Sales, 39 VA. J. INT'L L. 707, 711-12 (1999) (discussing network effects in relation to trade usages standards). I have also contributed to this literature. See Bryan Druzin, Buying Commercial Law: Choice of Law, Choice of Forum, and Network Externalities 18 Tul. J. Int'l & Comp. L. 131 (2009) (arguing that network effects induce standardization in choice of law and choice of forum clauses in transnational commercial contracts); Bryan H. Druzin, Why Does Soft Law Have Any Power Anyway?, 7 ASIAN J. INT'L L. 361 (2016) (arguing that many areas of soft law exhibit strong network effects which render it uniquely calibrated to induce voluntary adoption); Bryan Druzin, Towards a Theory of Spontaneous Legal Standardization, 8 J. INT'L DISP. SETTLEMENT 403, 407-08 (2017) (arguing that transnational legal norms evolve as a consequence of network effect pressures and increased interconnectivity).

^{46.} Tim Stobierski, *What Are Network Effects*?, HARV. BUS. SCH. ONLINE (Nov. 12, 2020), https://online.hbs.edu/blog/post/what-are-network-effects#:~:text=Direct%20net work%20effects%20occur%20when,result%20of%20attracting%20more%20users ("Social media platforms primarily benefit from direct network effects because the service's value grows as a direct result of attracting more users.").

^{47.} See Bryan H. Druzin, Escaping the Logic of Anarchy: A New Model of Collective Security, 19 CARDOZO J. CONFLICT RESOL. 565, 568–69 (2018) (positing a model of bottom-up collective security that harnesses the power of network effects and lock-in to consolidate the international system).

^{48.} See Bryan H. Druzin, Can the Liberal Order Be Sustained?: Nations, Network Effects, and the Erosion of Global Institutions, 42 MICH. J. INT'L L. 1, 5 (2020) (suggesting

networks, and even time zones. 49 All of these examples comprise networks of actors that benefit from a common standard. As more actors within the network adopt the standard, the value of the standard increases for all the other actors within the network, producing a network effect.⁵⁰ Language is an excellent example of a system that produces powerful network effect pressures. 51 As more people learn a language, its usefulness increases for all its speakers. 52 This phenomena is because as the number of speakers in the same linguistic network increases, so does the potential pool of persons with which each speaker can communicate. This increase in value then spurs further adoption, which increases its value even further in a selfreinforcing fashion. This positive-feedback dynamic reinforces bourgeoning patterns, eventually producing a universal standard around which users converge.⁵³

The application to rights is straightforward. An actor who fails to adhere to a prevailing right will face potential conflict. This may not occur in every interaction; however, across many interactions, agents will encounter a

"strategies to strengthen the cohesion of international organizations and the multilateral treaties that establish them by manipulating their network effect pressures in order to intensify their lock-in effect"); Bryan H. Druzin, *Tipping Points and the Formation of the European Union: Birth, Brexit, and Beyond*, 27 COLUM. J. EUR. L. 68 (2021) (arguing that tipping points played a decisive role in the formation of the European Union and assessing the potential of Brexit bringing about its collapse); Andrea K. Bjorkund & Bryan H. Druzin, *Institutional Lock-in Within the Field of Investment Arbitration*, 39 U. PA. J. INT'L L. 707 (2018) (explaining the market dominance of ICSID in international investment arbitration using a network effect paradigm); Mark J. Roe, *Chaos and Evolution in Law and Economics*, 109 HARV. L. REV. 641, 665 n.50 (1996) ("Similarly, institutions are embedded in complex networks").

- 49. For a good overview of other network effect examples in a wide range of contexts, see Joseph Farrell & Paul Klemperer, Coordination and Lock-In: Competition with Switching Costs and Network Effects 46–54 (May 2006), https://escholarship.org/content/qt9n26k7v1/qt9n26k7v1_noSplash_9493d00c92b6e9e8b252370191813466.pdf?t=ln r4iv (preliminary draft). For other inquiries along these lines, see Dominique Foray, *The Dynamic Implications of Increasing Returns: Technological Change and Path Dependent Inefficiency*, 15 INT'L J. INDUS. ORG. 733 (1997); PATH DEPENDENCE AND NEW PATH CREATION IN RENEWABLE ENERGY TECHNOLOGIES (James Simmie ed., 2014) (analyzing path dependence in international technologies focused on renewable energy).
 - 50. See Stobierski, supra note 46.
- 51. See GREWAL, supra note 4, at 73–88 (examining the relationship between network effects and the global dominance of the English language).
 - 52. Id. at 76 ("[A] language becomes a global language because of its network power.").
- 53. See id. at 25 ("A system is said to generate positive feedback when a change in one variable leads to a further change in that same variable, and in the same direction.").

greater likelihood of conflict with others. Absent a strong incentive to do otherwise, actors, being conflict-adverse, will thus tend to adopt the most-recognized rights. Rights recognition thus generates network effect pressure: as the user base of the right grows, so too will the inherent value of the right as a coordinating standard, which draws in more adopters. Rights possess an inherently high synchronization value in that they minimize unnecessary conflict and so are particularly susceptible to network effects.

The related idea of network *lock-in* is also important here.⁵⁴ Lock-in occurs when users are unable to abandon a network without suffering significant costs and, as a result, become "locked in" to the network.⁵⁵ While they are technically free to leave, the network pressure prevents them from doing so. For instance, because of their powerful network pressures, both Facebook users and speakers of the English language cannot easily exit these networks.⁵⁶ The need to interconnect with the larger network of users and the prospect of being stranded outside it stops them from abandoning the network. Similarly, the agents that recognize a right constitute a network of users that generate network pressure with respect to that right. Any agent wishing to plug into (or unplug from) this network will feel the strength of this network pressure and its attendant lock-in effect. Lock-in is key to explaining why hyper-inequality arises and why it is stable.⁵⁷

^{54.} The concept of lock-in is central to the literature on path dependence, which was first developed in the social sciences in the context of technological standards but has since found a wide breadth of application. *See* Arthur, *Competing Technologies*, *supra* note 44 (providing an early study of the dynamics of allocation in situations of increasing returns where agents choose between technologies competing for adoption); *see also* DOUGLASS C. NORTH, INSTITUTIONS, INSTITUTIONAL CHANGE AND ECONOMIC PERFORMANCE 73–104 (1990) (arguing that institutional lock-in impedes economic development).

^{55.} See, e.g., Arthur, Competing Technologies, supra note 44 at 126; Salil K. Mehra, Paradise Is a Walled Garden? Trust, Antitrust, and User Dynamism, 18 GEO. MASON L. REV. 889, 926 (2011) ("When substantial consumer lock-in exists, the result may be an entrenched dominant platform.").

^{56.} See, e.g., Fred Vogelstein, Network Effects and Global Domination: The Facebook Strategy, WIRED (May 17, 2012, 2:31 PM), https://www.wired.com/2012/05/network-effects-and-global-domination-the-facebook-strategy/; Sarah Jeong, I Tried Leaving Facebook. I Couldn't, The VERGE (Apr. 28, 2018, 9:00 AM), https://www.theverge.com/2018/4/28/17293056/facebook-deletefacebook-social-network-monopoly (documenting the author's personal experience attempting to leave Facebook and various network style pressures leading to her return).

^{57.} See infra Part III.

All rights produce network externalities because, whatever else they are, all rights function as conflict-minimizing coordinating standards. Because network effects grow more pronounced as the number of actors involved increases, it provides a great deal of explanatory power with respect to rights formation on the macro level. Network pressures can explain how and why rights take root, proliferate, and differ between cultures and across time.

II. The Evolution of Rights

This section discusses how network pressures shape the emergence of rights at the pre-legal level. The section is brief but critical as it lays out the proposed model of how rights emerge in a decentralized fashion. Without a central legislative authority establishing and enforcing rights, it seems impossible for large numbers of actors, each motivated by wildly divergent incentive structures and preferences, to somehow agree on the same standards for rights. Nevertheless, relatively stable rights standards reliably emerge across vast numbers of disconnected actors who share no direct interaction of any kind. Network pressures help explain how stable rights equilibria are reached at the macro level.

A. The Coordinating Function of Rights

Discussing and bargaining over rights is simply not possible in large groups of agents busily interacting. Consider drivers trying to coordinate on the chaotic roads of a city in the developing world where formal traffic rules are pervasively flouted. Drivers are free to follow the traffic rules they wish, yet patterns reliably emerge due to network pressures. This occurrence happens because in each discrete interaction, drivers for the most part adopt the road rule they perceive as most recognized by other drivers, such as the rule that motorcycles yield to taxis or taxis yield to

^{58.} There is a strong and weak version of this model. The strong version holds that network pressures account for why rights emerge. The weaker version simply claims that network pressures influence how rights form to a significant degree. Note that even the weak version is sufficient to reach the article's conclusions.

^{59.} This is not to say that these institutions do not change; however, this change tends to be slow rather than occurring in a sudden, punctuated fashion. *See* NORTH, *supra* note 54, at 6, 89.

cement trucks.⁶⁰ Likewise, the rule that is most followed provides the greatest coordinating benefit to minimizing potential collisions.⁶¹ Even where there is an incentive to deviate, like when the driver is in a rush, the benefit must be large enough to offset the consequences that might flow from non-compliance, such as a minor or even fatal traffic accident.⁶²

Each instance in which a driver recognizes a given rule contributes to the further emergence and continued dominance of that rule. The network pressure this produces pushes powerfully towards a single set of standards. So long as there is a sufficient flow of traffic on a network of roads, a spontaneous standardization will occur across vast numbers of drivers. This standardization occurs without the need for each of these drivers to interact with every other driver or for any drivers to explicitly agree upon which rules they will collectively adopt. Like the standardization of language in linguistic systems, ⁶³ there is no need for a central authority to set or enforce these rules. Mass convergence reliably emerges in a decentralized fashion purely as the result of network pressures.

Rights are no different. Because rights, like driving rules, serve a coordinating function by clarifying the accepted parameters of mutual behavior, commonly recognized rights facilitate individuals' interactions in large groups (in terms of avoiding conflict).⁶⁴ Just as the rules of the road help minimize traffic collisions, rights are the rules of society that help minimize social collisions. Rights are conventions that solve coordination problems involving the potential for conflict.⁶⁵ Where there is no potential for conflict, there is no need for rights, and they do not arise. There is a

^{60.} See Leif Petterson, The Real (and Unspoken) Rules of US Roads, LONELY PLANET (Oct. 30, 2012), https://www.lonelyplanet.com/articles/the-real-and-unspoken-rules-of-us-roads

^{61.} See Yagil, supra note 19, at 722 (describing subjective norms which permeate driving culture and drivers' decisions).

^{62.} Such situations are more formally captured by a battle of the sexes coordination game as opposed to a pure coordination game.

^{63.} See GREWAL, supra note 4, at 73–81 (explaining how English emerged as the global language of choice through network power and pressures).

^{64.} Like driving rules, it is not practical (nor possible without massive transaction costs) to engage in discussion and bargaining upon each interaction within a large group.

^{65.} Rights, as is the case of social norms more generally, are "customary rules of behaviour that coordinate our interactions with others." H. Peyton Young, *Social Norms*, *in* 7 THE NEW PALGRAVE DICTIONARY OF ECONOMICS 647, 647 (Steven N. Durlauf & Lawrence E. Blume eds., 2d ed. 2008); *see also* DAVID LEWIS, CONVENTION: A PHILOSOPHICAL STUDY (1969); NORTH, *supra* note 54, at 68 (discussing institutional constraints as conventions that solve coordination problems and using the example of driving rules as an illustration).

reason empty intersections on quiet country roads do not need traffic lights or stop signs. Vehicles rarely encounter each other so they do not need clear standards of coordination to minimize conflict. Where there is a lot of interaction among agents, however, there is a need for rights because of the potential for conflict. Thus, rights arise.

B. How Network Pressure Triggers the Formation of Rights

Network pressures play a crucial role in the evolution of rights. Network pressure allows agents to converge upon the same conflict-minimizing coordinating standards, which we then conceptualize as rights. Because adhering to concepts of rights that differ from one another may create conflict, there is an incentive to adopt the most commonly held rights. The value of a right, like the value of a driving rule, is commensurate with the number of people who also recognize the same right. Irrespective of its content, the value of a right as a conflict-minimizing coordinating standard grows as the number of people who recognize it increases. As more people recognize a right, the cost of not recognizing the right simultaneously grows because the chance of encountering conflict increases. For example, a rogue driver will, in the aggregate, encounter a cumulatively greater risk over her many interactions with other vehicles if she does not follow the prevailing rule. This potential generates a powerful network pressure that pulls actors into compliance. Even agents whose private views conflict with a right will still comply if the network pressure is powerful enough, just as drivers going 100 miles per hour on a freeway will just conform to what everyone else is doing.66

Network pressure pushes towards self-standardization as agents converge upon specific rights standards.⁶⁷ A single standard will eventually dominate the network as actors coalesce around the right. This arises naturally in an unplanned fashion from a myriad of agents working in blind coordination with one another, each recognizing the rights standards that best minimize potential conflict. This blind coordination brings about a spontaneous

^{66.} Agents will differ in terms of the degree to which a right conflicts with their incentives. As a right gains traction, the benefit of recognizing the right increases (along with the cost of not doing so). This will change the actors' incentive structure, pulling in an increasingly larger slice of agents who would otherwise reject the right until it is rational for most agents to recognize the right.

^{67.} Similar to a linguistic or traffic network, agents merely need to be indirectly linked through a loose web of network interconnection. So long as there is a sufficient degree of interconnection, the network may be sprawling and vast.

macro-level ordering—an "invisible hand" that shapes the marketplace for rights. The model also explains the diversity in patterns of local rights recognition across both space and time. While network pressures render rights markets unable to sustain multiple equilibria, where interconnection between actors within the network is weak (e.g., due to spatial or temporal insulation), communities may follow diverse evolutionary trajectories and end up with wildly different conceptions of rights.

When we consider the sheer volume of interactions people engage in, rights formation is the norm and conflict is in fact rare. This is because there is a cost to conflict, even for the stronger party. Some sort of rights structure is, therefore, usually preferred by everyone. Even when conflict erupts and rights collapse, some kind of rights structure will reassert itself before too long. Because conflict is costly to maintain for all parties, rights eventually emerge to reduce conflict. In this sense, rights form and emerge as coordination patterns to stop parties from sliding into unnecessary conflict. Like informal traffic rules, they are the natural by-product of the dynamic interaction of conflict-minimizing agents. Their formation may occur (and does occur) in the complete absence of a legal authority or governance structure to create them. Indeed, legal and political authority may be considered outgrowths of this very process of decentralized rights formation.⁷⁰

^{68.} Note that this model is predicated on simple coordination rather than cooperation. The role of rights in building cooperative arrangements (beyond simply avoiding conflict), while also true, is not emphasized here. Instead, the focus is on the avoidance of conflict. This conflict-avoidance model is more robust because, while the emergence of cooperation depends upon conditions that provide mutual benefit—conditions which are not always present—the potential for conflict is ever-present. Two neighbors, for example, might not enjoy the precise conditions that allow for positive-sum cooperation; however, so long as they are in contact, they are always capable of conflict. As such, the avoidance of conflict is the more reliable variable. We cannot always count on opportunities for cooperation, but we can always count on the potential for conflict, and actors desire to avoid unnecessary conflict.

^{69.} This occurs because local power imbalances between agents are magnified by network pressures, producing divergent patterns of rights standardization at the macrolevel. *See infra* Part III.

^{70.} The origin of legal and political authority is the subject of enormous debate among legal positivists and the legal literature more generally. It is, however, not explored here as it lies outside the main focus of the discussion. *See supra* note 2 and accompanying text.

III. The Rise of Inequality

This section explains the emergence and stability of inequality. To do this, the section discusses how rights emerge in relation to power.⁷¹ The model of rights formation set out above holds that rights emerge because they reduce unnecessary conflict. It is thus highly sensitive to the distribution of power between agents. Under this model, power imbalances between agents play a critical role because they change the cost of conflict. Differences in power decrease the cost of potential conflict for some agents and increase it for others. Thus, the distribution of power between agents will determine the pattern of rights they eventually settle into. While other variables may also contribute to how rights pattern themselves, power dynamics are a dominant variable under this model. Power dynamics establish an initial pattern of rights that then is standardized at scale by network pressures. As network pressures build and more actors are pulled into recognizing the right, many actors who might otherwise not recognize the right do so anyway. This eventually leads to near-perfect consolidation of the rights pattern at the macro level. To explain how this occurs, this section discusses the emergence of equality, inequality, and hyperinequality. To understand how systems of inequality arise, it is helpful to first examine the conditions under which equality arises.

A. Equality: Pedestrians vs. Pedestrians

Any situation involving two or more people that has distributional implications will tend to, over time, produce rights. Because a right is a

^{71.} The standard political science definition of power is employed here, which I borrow from R.A. Dahl: power is the ability of A to make B do something that B would not otherwise do. See Robert A. Dahl, The Concept of Power, 2 BEHAV. Sci. 201, 202-03 (1957). This power may come in many forms: physical, economic, social, psychological, etc. For some key works in the modern literature on social and political power, see generally MAX WEBER, ECONOMY AND SOCIETY: AN OUTLINE OF INTERPRETIVE SOCIOLOGY 941-48 (Guenther Roth & Claus Wittich eds., Univ. of Cal. Press 1978) (1921) (analyzing domination as a theory of power); Peter Bachrach & Morton Baratz, Two Faces of Power, 56 AM. POL. SCI. REV. 947 (1962); STEVEN LUKE, POWER: A RADICAL VIEW (1974); Stewart R. Clegg, Radical Revisions: Power, Discipline and Organizations, 10 ORG. STUDIES 97 (1989); Stewart Clegg, Frameworks of Power 1–20 (1989); Anthony Giddens, ELEMENTS OF THE THEORY OF STRUCTURATION (1984). For a more heterodox treatment of the concept of power, the work of Michel Foucault is indispensable. See MICHEL FOUCAULT, DISCIPLINE AND PUNISH: THE BIRTH OF THE PRISON (Alan Sheridan trans., Pantheon Books 1977) (1975); see also Antonio Gramsci, Selections from the Prison Notebooks (1971); JUDITH BUTLER, THE PSYCHIC LIFE OF POWER: THEORIES IN SUBJECTION (1997).

particular distribution of freedom and authority, all rights by definition have at least some distributional implications. For example, one person's right to a quiet environment implies that her neighbors do not have the right to hold nightly pep rallies. One person's right to smoke in a restaurant implies that the non-smokers dining in the restaurant do not have a right to breathe clean air. This is why rights emerge—they are behavioral guardrails that mediate divergent sets of interests that would otherwise likely lead to unnecessary conflict. The stronger the preferences involved are, the greater the potential for conflict. The greater the potential for conflict, the more likely a stable rights patterning will emerge as agents seek to satisfy their preferences while also trying to minimize unnecessary conflict.

1. Droughts and Water Rights

For example, imagine a village that has a well that offers unlimited drinking water, and each villager simply drinks as much water as they wish. Because this has no distributional implications and everybody's preferences are fully satisfied, no rights regarding water usage will emerge here. The villagers will only be understood as having a 'right' to draw water from the well if doing so starts to have distributional implications. If, for example, the villagers encounter a sudden drought that severely limits their well's supply of water, their preferences will be affected, and the potential for conflict between them will arise. Under this new condition of scarcity,

^{72.} I mean distribution in its broadest sense and not only in terms of resources (although this certainly includes resource distribution). For example, technically speaking, the right to not be murdered limits the rights of killers to murder. This is a specific distribution of freedom and authority.

^{73.} To put this in Hohfeldian terms, rights are *correlative*: the first has a liberty (that others keep quiet) and the neighbors have a duty (to not make noise). *See* HOHFELD, *supra* note 31, at 38.

^{74.} Preferences alone are not enough to trigger rights formation. Rights only emerge where preferences collide and rights are needed to minimize conflict. For example, while people have a strong preference to blink their eyes fifteen to twenty times per minute on average, John L. Andreassi, Psychophysiology: Human Behavior and Physiological Response 310 (5th ed. 2010), this has no distributional consequences and so there are no rights regarding this behavior.

^{75.} For example, nobody speaks as if individuals do or do not have a right to move their foot. However, if your foot is on a car accelerator in city traffic, we suddenly speak in the language of rights because how you move your foot has potentially serious distributional implications.

rights will eventually emerge to minimize conflict.⁷⁶ A new norm of water conservation may standardize in which each villager has a right to draw a certain daily amount of water from the well. This right will reflect the strength of each villager's preferences, balancing their desire for water against their desire to avoid conflict.⁷⁷ The right that emerges will be shaped by the distribution of power between the villagers because this determines the cost of potential conflict.

2. Shopping Malls and Walking Rights

Consider another example—pedestrians walking around a town square, a shopping mall, or any other similarly unstructured open space. This example has very simple distributional implications. Each person wants to walk in the direction they please but does not want to collide with other pedestrians. What rights emerge in such situations? The system of rights is something like this: each pedestrian has a right to walk wherever they please so long as they do not collide with other pedestrians. The reason each pedestrian is afforded the same right is that—and this is a crucial point—they have roughly *equal power* relative to each other in terms of their ability to inconvenience the other by walking into them. Pedestrians engaging with other pedestrians will tend towards equal walking rights because they have roughly equal power. Each pedestrian stands to lose more or less equally from conflict, so equality of rights is the equilibrium into which they tend to settle.

In the case of walking rights, the stakes are low, so these rules are not generally conceptualized as rights. They are thought of as simple social

^{76.} This may be after a prolonged period of conflict, but eventually the cost of continuous conflict will cause the villagers to settle into a pattern of rights.

^{77.} To simplify the discussion, I assume that the agents' preferences are roughly equal (in this case for water and to avoid unnecessary conflict). This, however, will not always be the case. The villagers, for example, could desire water at different levels of intensity. Differences in preferences are as important a variable as the cost of conflict, but it is not considered in the present model. For a great many things—such as a desire to drink water, to not be assaulted, or to not be murdered—agents' preferences can be assumed to be more or less equal.

^{78.} Other rights also emerge, such as unreasonably hindering other pedestrians' path, walking too slowly, too quickly, too unpredictably, etc. However, for expository simplicity, these are left out of the discussion.

^{79.} There may still be minor power imbalances such as a large man colliding with a small child; however, although the child would come out worse, the man in this scenario will still be sufficiently inconvenienced by the collision.

norms if they are thought of at all. When the stakes get higher, however, more formal rights recognition kicks in. Anything that touches on issues around which agents have naturally strong preferences and will therefore defend tooth-and-nail (increasing the potential for conflict) will produce rights of a more formal nature. Examples include rights related to self-defense and property. Such rights tend to be universal because they involve *universally* strong preferences. These rights also tend to be less culturally specific because they are shaped by core preferences and, therefore, are less susceptible to the contingencies of history and environment. It is unsurprising that, for example, the right against theft or murder is universal. People across the board value their property and prefer not to be murdered.

The logic of the model implies that wherever the balance of power between agents is more or less even, the rights afforded to them will tend to be equal. This is true on every level of agency, from individuals to groups, and even to political entities such as nation-states. It is not by accident that, for instance, the traditional boundaries of a nation's territorial waters only extended to three nautical miles from its coastline.⁸³ Three nautical miles is the maximum distance that a cannon could be fired from the shore at a ship at sea.⁸⁴ Beyond the reach of their cannons, nations' power relative to one another more or less equalized, so they settled into patterns of equality in

^{80.} This would explain why, for example, all legal systems have laws related to property rights. See Anthony Ogus, The Economic Approach: Competition Between Legal Systems, in Comparative Law: A Handbook 155, 157 (Esin Örücü & David Nelken eds., 2007); Richard Barnes, Property Rights and Natural Resources 316 (2009); Likewise, self-defense is recognized in all known legal systems. See Geert-Jan Alexander Knoops, The Prosecution and Defense of Peacekeepers Under International Criminal Law 166 (2004); The International Sourcebook on Capital Punishment 169 (William A. Schabas et al. eds., 1997); Whitley R. P. Kaufman, Justified Killing: The Paradox of Self-Defense 20 (2009). "Formal" does not, however, necessarily mean legal recognition, but rather simply a widespread recognition that we are dealing with rights.

^{81.} Where a behavior's distributional implications are trivial and agents' preferences regarding the behavior less strong, rights tend to be more culturally specific. It is often the case that the right can tip either way, or even multiple ways.

^{82.} Note that those outside one's network (and with whom one does not have to directly or regularly deal with) have not historically been afforded the right against murder or theft, nor are they currently depending on differences in military uniform, culture, or even species. Much of this may be chalked up to a fundamental inequality in power.

^{83.} See H.S.K. Kent, The Historical Origins of the Three-Mile Limit, 48 Am. Soc'Y INT'L L. 537, 537–38 (1954).

^{84.} See id.

terms of access to the oceans.⁸⁵ The model predicts that wherever agents' power is roughly equal, we can expect to see equality of rights. The general balance of power between agents sets the basic structure of rights, which then is reinforced and standardized at a societal level by the network pressure it produces.

B. Inequality: Pedestrians vs. Cement Trucks

The model sees rights as the result of a tug-of-war between parties shaped by their preference to have things a certain way and their preference to avoid conflict. Rights are like the negotiated settlements between litigants of equal bargaining power. An equal balance of power will tend to produce equality; imbalances of power, however, will tend to produce inequality. In our village example, the new norm regarding water usage need not be an equal allocation of water. Different normative patterns of water usage might emerge depending on the distribution of power among these villagers and the strength of their preferences (both to access the water and to avoid conflict). If a subgroup of villagers, or even a single agent, enjoys a position of significant power over the other agents, a rights equilibrium may stabilize in which those with less power receive less access to water.

^{85.} This model of rights formation is particularly clear in the case of international relations because the international system remains largely anarchic, possessing only an anemic legal order. See Bryan H. Druzin, The Parched Earth of Cooperation: How to Solve the Tragedy of the Commons in International Environmental Governance, 27 DUKE J. COMP. & INT'L L. 73, 103 (2016) (proposing using signaling games to sustain cooperation and solve the tragedy of the commons in environmental governance).

^{86.} The idea that rights are the product of power differentials draws from conflict theory. Conflict theory, as first developed by Karl Marx, argues that competition between agents for limited material resources produces systems of social order. For Marx, the emergent social institutions—law, government, norms, and values—are expressions of this competition. See generally Karl Marx & Friedrich Engels, The Communist Manifesto 76–84 (Jeffrey C. Isaac ed., Yale Univ. Press 2012) (1848); Karl Marx, A Contribution to the Critique of Political Economy 205–14 (Maurice Dobb ed., Int'l Publishers 1979) (1859). Conflict theory is one of the four dominant paradigms of modern sociology. Jiří Šubrt, The Perspective of Historical Sociology: The Individual as Homo-Sociologicus Through Society and History 16 (2017) (citing Jonathan H. Turner, The Structure of Sociological Theory (1974)).

^{87.} Under the model, if animals had equal power as us, they would likely be afforded equal rights. However, they do not, so they are not. The same is true, for example, in the case of foreigners, enemy populations, populations in the global south, children, and those yet unborn (i.e., when considering the future impact of climate change).

Consider again our pedestrian example. This time, however, instead of pedestrians coordinating with other pedestrians, imagine a scenario in which pedestrians are coordinating with cement trucks traveling at high speeds on roads without any clear traffic rules. Into what pattern of rights will these agents likely settle? We need not look further than the chaotic roads of cities in much of the developing world for an answer. The rights equilibria that emerge on these roads tend to be shaped by the cost of potential conflict between parties and so reliably break down along similar lines. Pedestrians have little to no rights. Motorcycles have slightly more rights than pedestrians, followed by cars, which are followed by buses, and so on. Large cement trucks are the uncontested kings of the road. Different rights are afforded to the driver of the cement truck than to the pedestrian because of the disparity in power in terms of which party will lose the most in the event of a collision. Because the pedestrian will fare far worse than the front grill of the cement truck, the price of conflict is higher for the pedestrian. Thus, pedestrians are willing to cede more ground in terms of rights to avoid conflict, which produces a rights pattern of extreme inequality between the pedestrian and the cement truck. Once this basic rights structure emerges, network pressures strengthen and standardize the patterning at a macro level.

Indeed, the harsh lesson history teaches is that the limits of one's power are often the limits of one's rights. History tells a story in which power dynamics loom large, and in which rights reliably break down in line with power imbalances. Disparities in power can result in patterns of profound inequality. Inequality often forms in relation to gender, race, sexual orientation, religion, language, tribe, age, caste, social and economic class. Any identifiable group with less relative power than another is a candidate for inequality. Historically, even left-handed people were subject to discrimination.⁸⁸ The common feature of these systems of inequality is that they are born from power imbalances of some kind. This power imbalance

^{88.} Persecution of left-handedness was historically widespread. See Lee Ellis, Left- and Mixed-Handedness and Criminality: Explanations for a Probable Relationship, in LEFT-HANDEDNESS: BEHAVIORAL IMPLICATIONS AND ANOMALIES 485, 489 (Stanley Coren ed., 1990) (citation omitted). A clear minority, southpaws make up approximately 10% of any given population. See Linda Searing, The Big Number: Lefties Make Up About 10 Percent of the World, Wash. Post (Aug. 12, 2019, 8:15 AM EDT), https://www.washingtonpost.com/health/the-big-number-lefties-make-up-about-10-percent-of-the-world/2019/08/09/699 78100-b9e2-11e9-bad6-609f75bfd97f_story.html.

typically comes in the form of a majority lording over a marginalized minority, but it may come in other forms.

C. Hyper-Inequality: A Million Cyclists vs. One Cement Truck

We have discussed the emergence of equality and inequality. We are now in a position to explain the emergence of hyper-inequality. As described in the introduction, a system of hyper-inequality is one where those disadvantaged by a right, as a group, potentially hold more power than those who benefit from it. The emergence and stability of hyper-inequality is difficult to explain because the underlying power dynamic implies that the right should not evolve in this fashion. This final section of the discussion describes how stable systems of hyper-inequality may evolve as the result of network pressures.

1. An Answer to Hume's Question

As noted in the introduction, nearly three centuries ago Hume noted the ease with which the few govern the many:

Nothing appears more surprizing to those, who consider human affairs with a philosophical eye than the easiness with which the many are governed by the few; and the implicit submission, with which men resign their own sentiments and passions to those of their rulers.⁸⁹

Hume goes on to note that this is especially odd given that "force is always on the side of the governed." While Hume is speaking here specifically of government, the question he is asking is essentially the same question this Article is asking: how is it that stable power structures emerge where the group that has less power controls the group with potentially greater power? In the case of government, this is the few governing the many. In the case of systems of hyper-inequality, these are rights that

^{89.} HUME, supra note 15, at 16.

^{90.} *Id.* (emphasis omitted). Hume's answer, as he goes on to write, is that government is founded upon nothing more than what he calls "opinion." *Id.* By this Hume means something like normative structures that legitimize government in the eyes of the governed. *See id.* The present model provides further explanation as to how this "opinion" emerges and why it is stable.

^{91.} Regardless of the form of government (i.e., whether it is oppressive, benevolent, or neutral), all governments (1) comprise a smaller group controlling the actions of a larger group, and (2) necessarily involve constraining the behavior of the individuals in the larger group. To the extent that law and government are simply composed of rights, they are the

favor the less powerful over the more powerful.⁹² As I will show, our model of rights formation answers Hume's question.

2. The Emergence of Hyper-Inequality

The process through which rights emerge has been described here as a market that is shaped by the relative cost of conflict. Unequal rights form as a consequence of an imbalance in power between agents because this raises the cost of conflict for the less powerful agents and lowers it for the more powerful agents.⁹³ Network pressures, however, distort this market. This distortion sets in as we move across levels of scale. In our discussion of equality and inequality we saw how network pressures magnify low-level rights patterns at scale.⁹⁴ In the cases of equality and inequality, it was assumed that the power dynamic at the higher level simply reflected the power dynamic at the lower level.⁹⁵ There is, however, no reason to assume this. Network pressures can distort how rights form: they can entrench and amplify low-level rights patterns at scale that do not at all reflect the actual power dynamics at that higher level of scale.

To illustrate how this occurs, imagine a lawless city with no established convention regarding which side of the road on which to drive. The traffic in this city is composed solely of cement trucks and bicycles. For whatever reason, the drivers of the cement trucks prefer to drive on the left-hand side of the road, while the cyclists prefer to drive on the right. Each time a bicycle interacts with a speeding cement truck, the power imbalance between them will force the bicycle to pass on the left. This will spark a rights pattern that favors left-hand drive. Network pressure will cause left-hand drive to eventually become the dominant standard on the road.

However, what is critical here is that, as network effects kick in and more and more drivers recognize left-hand drive, the cost of not recognizing left-hand drive increases *unrelated to the power imbalance that* first gave rise to the rights pattern. ⁹⁶ The network pressure is a form of

same as any other system of rights. The rights that constitute law and governance are recognized by those who govern and those who are governed, and concern who may govern, how they may govern, and the obligations of the governed.

^{92.} Although this typically takes the form of a majority-minority dynamic, it does not have to; for example, gender inequality is not predicated on a majority-minority divide.

^{93.} See supra Section II.B.

^{94.} See supra Part III.

^{95.} See supra Part III.

^{96.} While the cost of not recognizing the right in each individual interaction does not increase, the cost increases cumulatively, in the aggregate, across many interactions because

power produced over and above the initial power imbalance. At a certain stage, the power imbalance that first produced the right becomes irrelevant in terms of maintaining the coordination pattern. The network pressure alone is enough to keep large numbers of people locked into the pattern. The result is that the right to drive on the left-hand side of the road can remain stable even if the power imbalance that first produced it completely disappears at scale. There need not be an even number of cement trucks and bicycles: there could be just a handful of cement trucks barreling down the roads of the city, and the same rights pattern would emerge.⁹⁷ The power imbalance just needs to spark an initial coordination pattern that then gets amplified and reinforced at scale by network effects. Agents become locked into the coordination pattern even if the power imbalance does not hold at the macro level or later changes. In our example, the city could grow larger until bicycles outnumber cement trucks a million to one and the rights pattern would remain stable. Indeed, network pressures are so strong that we could remove all cement trucks from the city and the coordination pattern would still hold. In the absence of some exogenous force, cyclists would continue driving on the left-hand side of the road simply because they are locked into the coordination pattern.

The ability of people to get stuck in coordination patterns means that rights at the macro level may not at all reflect the actual power dynamics at that level of scale. A small group may be afforded rights that far exceed their true ability to impose costs on the disadvantaged group. In this way, network pressures can lock in socio-political systems of inequality and render them extremely stable at scale. This is in fact the natural tendency of large group systems—network pressures tend to produce hyperinequality. Institutions in which the few dominate the many, such as aristocracies, caste systems, the subjugation of racial majorities, 99

more of the network is coordinating using that right. As the cost increases, actors who are otherwise deeply disadvantaged by the rights pattern will recognize the right. In this way, agents may end up recognizing a right that deeply conflicts with their interests.

^{97.} Left-hand drive would prevail over right-hand drive because the cost of collision for the cyclist is far greater than the cost of collision for the cement-truck driver. This imbalance will cause a coordination pattern that favors right-hand drive to emerge even though there are more bicycles.

^{98.} See supra Section III.C.2.

^{99.} This was the case, for example, with Apartheid South Africa and in parts of the U.S. South during slavery. In colonial South Carolina, for instance, black slaves outnumbered the slave-owning white minority by roughly three to one. RICHÉ RICHARDSON, BLACK MASCULINITY AND THE U.S. SOUTH: FROM UNCLE TOM TO GANGSTA 32 (2007). In the South

particularly rapacious forms of monopoly capitalism, governance structures based on hereditary rule, plutocracies, and other forms of oligarchy, can prove extremely robust. These systems of hyper-inequality are stable because the disadvantaged are locked into the coordination pattern even though technically, as a group, they collectively have more power.¹⁰⁰

3. Locked-in Inequality

Hyper-inequality is essentially a collective action problem: each agent cannot deviate from the rights pattern unless they all do so and at the same time, so no one does. ¹⁰¹ The existing rights pattern may be grossly suboptimal from the perspective of each agent in the repressed majority, but it is the only game in town. Each agent, individually, is as unable to abandon the prevailing rights pattern as drivers are unable to abandon prevailing traffic rules. Agents may be technically free to leave, but practically speaking, they are unable to do so.

In the case of our cement truck and bicycle example, if there is only one cement truck in a city of a million bicycles, the power imbalance at scale would no longer be the same. As a group, the cyclists would have far more

African 1960 census, non-white South Africans outnumbered white South Africans by roughly four to one. *See* IRVING KAPLAN ET AL., AREA HANDBOOK FOR THE REPUBLIC OF SOUTH AFRICA 100 (1971).

100. This is similar to the idea of "institutional lock-in" as argued by Douglas North. *See* NORTH, *supra* note 54, at 92–104. Institutional lock-in is central to the literature on path dependence. As it relates to network effects, the argument of path dependence is that increasing returns can cause technologies or institutions to develop along constraining growth trajectories (i.e., paths) that become "locked in" and resistant to change, making it difficult to reverse suboptimal patterns of development. However, while North looks at the tendency of lock-in to create inefficiencies across time, the idea here is that lock-in may produce inequalities across scale (although systems of hyper-inequality can also persist across time in the face of shifting power dynamics). The emphasis here is not temporal as in the case of path dependence; the distorting effect emerges in relation to scale in the transition from the micro to the macrolevel. *See id.* at 94–95. North builds off of the earlier work of Paul A. David and W. Brian Arthur. *See generally* David, *supra* note 41, at 332–34; Arthur, *Competing Technologies*, *supra* note 44, at 122, 128; Arthur, *Positive Feedbacks*, *supra* note 44, at 92, 98–99.

101. Hyper-inequality can be understood as a collective action problem because no agent wants to be the first to stop following the prevailing rights pattern. They would each prefer others to go first and bear that cost. While the problem of collective action has long been recognized, research has overlooked the potential role played by network pressures, which in the case of rights, is what pulls actors into the problem in the first place. *See generally* RUSSELL HARDIN, ONE FOR ALL: THE LOGIC OF GROUP CONFLICT 26–45 (1995) (providing background on collective action and the emergence of governance structures).

power (the cement truck is no match for the sheer mass of a million bicycles), but this is only true at a collective level and the problem is that each cyclist acts individually. If all one million cyclists simultaneously refused to recognize left-hand drive, they could realize their collective power. But this requires a level of coordination that is very difficult to achieve. There is an implicit price to pay for not doing what everyone else is doing. Like switching your life savings into a currency no one recognizes, there is a cost to recognizing a right if you are the only one who does so. So, while the cyclists may be better off if they all switched to right-hand drive, nobody wants to be the first to ride into a speeding cement truck. 102 The cyclists are technically free to drive on the wrong side of the road; however, this is not a viable option as a practical matter. It would not matter even if the initial power imbalance that gave rise to left-hand drive completely disappeared at scale—each cyclist would remain trapped in the coordination pattern.

In this way, network pressure can lock in patterns of low-level inequality and keep them stable at scale even if power dynamics at that greater level differ. The lower-level power imbalance is only significant to the extent that it sparks the initial pattern of rights. Minor power imbalances that are insignificant at scale can get powerfully amplified though feedback effects and shape the legal, political, social, and economic institutions of entire societies. Systems of patriarchy, for example, may spring from little more than slight differences in physical strength that then get magnified and find institutional expression at scale.¹⁰³ When the subordinate group internalizes

^{102.} In the literature on standards, this dynamic is referred to as the "penguin effect" because penguins who need to enter the water but fear the presence of predators will often all wait around for long periods for another penguin to test the waters first. See Joseph Farrell & Garth Saloner, Installed Base and Compatibility: Innovation, Product Preannouncements, and Predation, 76 Am. Econ. Rev. 940, 943 (1986). Because no one is willing to bear the initial costs of switching to a new standard, it is very difficult to achieve enough critical mass to get started and so no one ever switches to the new standard. See id. at 942. Indeed, it was for this reason that Roman slaves were not made to wear clothing that would distinguish them from ordinary free-born Romans—it was feared that if slaves realized how numerous they were, they would be more likely to revolt. See LIZA CLELAND ET AL., GREEK AND ROMAN DRESS FROM A TO Z 172 (2007).

^{103.} This would explain the universality of patriarchy across time and culture. On the universality of patriarchy arising from biological differences, see generally STEVEN GOLDBERG, THE INEVITABILITY OF PATRIARCHY (1973); STEVEN GOLDBERG, MALE DOMINANCE (1979); STEVEN GOLDBERG, WHY MEN RULE: A THEORY OF MALE DOMINANCE (1993). But see GERDA LERNER, THE CREATION OF PATRIARCHY 16–18, 53 (1986) (arguing that patriarchy is in fact not universal, citing ethnographic evidence of matriarchal systems).

the system of inequality, which is very often the case, the lock-in effect can be extremely stable. 104

This is how large numbers of people so easily slip into patterns of hyper-inequality that do not favor them even though, collectively, the power lies with them. To answer Hume, this is how the few can govern the many, and this is how systems of hyper-inequality arise.

Conclusion

This Article gave a rational choice model of rights that explains how rights form. Network pressure pulls agents into recognizing rights in a self-reinforcing fashion until entire societies converge around a unified set of rights. This model is also able to explain how systems of inequality emerge. Minor imbalances in power spark patterns of inequality that then get powerfully magnified at scale by network pressures. Because these power imbalances are so ubiquitous, social and structural inequality is a persistent feature across time and culture and find expression in the institutions that determine the legal, political, and economic organization of society.

That these systems often favor the few at the expense of the many is, at first blush, confusing given that the many, by definition, outnumber the few and this numerical disparity usually means that, as a group, the many have more power. Network pressure, however, explains how agents get locked into coordination patterns from which they then cannot break free even if the actual power dynamic favors them at scale. The result is that systems of

Note that even if patriarchy is not universal, it is still by far the most dominant historical system of social organization.

104. This is not uncommon among, for example, colonized populations, lower classes, and female populations in gender-repressive societies. The concept of adaptive preferences explains situations in which agents come to prefer mistreatment and actively perpetuate their own oppression. See generally Martha C. Nussbaum, Women and Human Development: The Capabilities Approach 135–48 (2000); Serene J. Khader, Adaptive Preferences and Women's Empowerment 3–18 (2011); Luc Bovens, Sour Grapes and Character Planning, 89 J. Phil. 57 (1992). This also builds on the related idea of hedonic adaption—the tendency of agents to quickly adapt to the state they are in, good or bad. See Daniel Kahneman, Experienced Utility and Objective Happiness: A Moment-Based Approach, in Choices, Values, and Frames 673 (Daniel Kahneman & Amos Tversky eds., 2000); Daniel Kahneman & Richard H. Thaler, Anomalies: Utility Maximization and Experienced Utility, 20 J. Econ. Persp. 221, 230 (2006); Shane Frederick & George Loewenstein, Hedonic Adaptation, in Well Being: The Foundations of Hedonic Psychology 302 (Daniel Kahneman et al. eds., 1999).

hyper-inequality can persist for long periods because no agent can individually escape from the pattern of rights into which they are trapped.